

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(43) 国际公布日
2006 年 1 月 26 日 (26.01.2006)

PCT

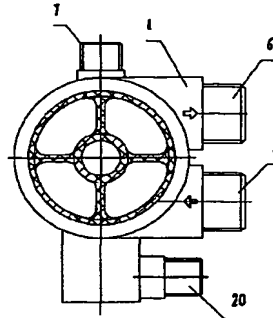
(10)
WO 2006/007772 A1

- | | | |
|----------------|---------------------------------|--|
| (51) 国际分类号: | F16K 11/10 | (71) 申请人及 |
| (21) 国际申请号: | PCT/CN2005/000343 | (72) 发明人: 杨洞德(YANG, Runde) [CN/CN]; 中国浙江省温州市南郊尤方工仙区 1# 地块, Zhejiang 325029 (CN)。 |
| (22) 国际申请日: | 2005 年 3 月 18 日 (18.03.2005) | (72) 发明人, 及 |
| (25) 申请语言: | 中文 | (75) 发明人 / 申请人 (有时美国): 伍孝荣(WU, Xiaorong) [CN/CN]; 中国浙江省温州市南郊尤方工仙区 1# 地块, Zhejiang 325029 (CN)。 丁烽阳(DING, Fengyang) [CN/CN]; 中国浙江省温州市南郊尤方工仙区 1# 地块, Zhejiang 325029 (CN)。 |
| (26) 公布语言: | 中文 | (74) 代理人: 上海新天寺利代理有限公司(SHANGHAI XIN TIAN PATENT AGENT CO., LTD.); 中国上海市南昌路 59 号科羊食堂思南楼 1606 室, Shanghai 200020 (CN)。 |
| (30) 优先权: | | |
| 200420062895.3 | 2004 年 7 月 17 日 (17.07.2004) CN | |
| 200420078956.5 | 2004 年 8 月 21 日 (21.08.2004) CN | |

[几 页]

(54) Title: A MULTIFUNCTION CONTROL VALVE FOR A WATER TREATMENT SYSTEM

(54) 发明名称: 水处理系统用多功能控制阀



(57) Abstract: A multifunction control valve for a water treatment system includes a valve body provided with a water inlet, a water outlet, and a wastewater outlet. A valve core connected to a valve rod is located in the valve body. The valve body also has fluid passages communicated with the interior and exterior of the filtering core for the water treatment system, respectively, wherein the valve core uses a pair of active valve-plate and static valve-plate of which the endfaces movably and hermetically fit each other. The active valve-plate is connected to the valve rod, and a number of corresponding through holes is located in the static valve-plate. By connecting with corresponding interfaces, the active valve-plate is provided with one through hole and two dead holes. The through hole and dead holes in the active valve-plate are communicated with the corresponding through holes in the static valve-plate by rotating the active valve-plate, thereby forming various fluid passages to achieve the fluid control. The respective hole fits of the active valve-plate and the static valve-plate are distributed on the radius of the same turning circle. When used, by the relative lap position switching fit of respective holes in the active valve-plate and the static valve-plate, various control states may be achieved, such as softening, cleaning, or back washing, etc. The invention is simple in operation and compact in structure. The invention may be used in various industrial or domestic water treatment systems so as to improve the water treatment quality.

[见续页]

WO 2006/007772 A1



(81) 指定因 (除另有指明, 要求每一神可提供的國家保妒): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW。

SD, SL, SZ, TZ, UG, ZM, ZW), 歐立 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 歐洲 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)。

本回阮公布。

— 包括圖阮檢索報告。

(84) 指定因 (除另有指明, 要求每一神可提供的地區保妒): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA,

所引用双字母代碼及其它縮巧符膏, 清參考刊登在每期PCT公報期刊起始的 "代碼及縮巧符膏簡要坑明" 。

(57) 摘要:

一神水她理系統用多功能控制閥, 包括投有进水口、出水口和污水出口的閥体, 和閥杆連接的閥芯置于閥体中, 閥体中还設有流道和水她理系統濾苗的内部及外部分別連通, 其特征力: 濾苗采用一肘端面特功密封配合的劫閥片和定閥片, 劫閥片連接在閥杆上, 在定閥片上升投若干肘匝的通孔, 通迂勻相射匝的接口相連, 在劫閥片上升投一介通孔占二介盲孔, 通迂旋轉劫閥片, 使劫閥片上的通孔、盲孔与定閥片上的相對应的孔相通而形成多种不同的流体通道来实现对流体控制, 所述的定閥片和劫閥片的各孔配合分布在同一回特圖半往上。使用时通迫功、定閥片上的各不同孔的相對重疊位置切换配合, 即可突現軟化或淨化、反冲洗等不同控制狀態, 操作清楚方便, 結構緊湊, 各神工此或家用水她理系統均能使用, 提高水她理質量。